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TITLE : THERMOCHROMIC POLYMER COMPOSITION AND FORMED THERMOCHROMIC
POLYMER ARTICLE PRODUCED BY USING THE COMPOSITION AS SUBSTRATE

ABSTRACT : PROBLEM TO BE SOLVED: To obtain the subject composition composed of a polymeric compound and a dye, varying the spectral characteristics by the change in the compatibility at a specific temperature, producible at a low cost, usable without necessitating separate substrate, capable of arbitrarily changing the temperature to change the spectral characteristics and useful for various recording material, memory material, etc.

SOLUTION: This composition is composed mainly of (A) a polymeric compound such as a thermoplastic polymer (e.g. an olefin resin having a crystallinity of 10-75% such as ethylene resin or propylene resin) and (B) a dye (e.g. a dye having a hue difference between the hue based on the reflection spectrum in solid state and the hue based on the transmission spectrum in chloroform solution of $\geq 5^\circ$ in terms of Δh representing the hue angle difference in LCh color specification system). The spectral characteristics are varied by making the compatibility of the components A and B to be varied at a temperature lower than the melting point of the component A by e.g. $\geq 5^\circ\text{C}$. The temperature to vary the spectral characteristics is controllable e.g. by controlling the concentration of the component B in the composition.

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